

PATENT SPECIFICATION

NO DRAWINGS

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COMPLETE SPECIFICATION

Method of Icing and Preserving Fruit or the like

I, GEORGES BAUDOT, of 11, Allée due Sud, La Courneuve, Seine, France; a French citizen, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention relates to the icing and preserving of chestnuts and candied fruit such as cherries and plums. The chestnuts particularly concerned herein are of the type of fruit known as the marron.

Heretofore in order to prepare iced chestnuts (otherwise known as marrons glacés) and other candied fruit, it was usual to proceed in two main steps, namely: a first step in which the fruit was peeled if necessary, boiled in water and candied, i.e. immersed in a bath of syrup intended to impregnate it with sugar; and then a second step in which the fruit was iced, i.e. coated with crystallizing sugars followed by introduction into a special furnace if necessary, thus providing the fruit with a film having the appearance of an icing.

This conventional method, however, has a drawback. When the sales season for the product is passed it is advisable in order to preserve the fruit to place it back in a syrup bath. With fruit coated by the conventional process, the icing intended to disappear in the syrup bath.

It is an object of the present invention to provide a method of preparing iced chestnuts and candied fruit which do not have this drawback.

It is a further object of the present invention to provide iced chestnuts and candied fruit which are of a more attractive appearance than those known heretofore.

It is a further object of the present invention to provide a method of icing chestnuts and other fruit which does not require treatment in a furnace.

The method of icing and preserving chestnuts and other fruit in accordance with the invention consists in taking the fruit prepared in accordance with the first step indicated above and icing the fruit in the following manner. The fruit is coated by immersion or otherwise with a syrup comprising sugars and at least one gelatinous product having a base of an alginate and/or a carragenate, and the coating is fixed and coagulated by contact with an aqueous calcium chloride solution which may be applied by spraying or by immersing the coated fruit in a bath. Preferably, the coating is a viscous layer applied by immersing the fruit in the syrup.

The iced chestnuts and other candied fruit thus obtained can be sold as such without being placed in a furnace and are of a more attractive appearance and better preserved than the iced chestnuts and other candied fruit available heretofore.

Furthermore, the iced chestnuts and candied fruit prepared in accordance with this method have the great advantage that they can be preserved for a long time in a syrup without any danger of the icing dissolving since it is protected by the coagulated fixed layer. They can even be enclosed in a tight syrup-filled container and sterilized by heat or any other method of preservation without any drawback resulting from this treatment. On the contrary, the iced chestnuts and candied fruit prepared in this manner are less fragile and there is no risk of their breaking in the syrup as in the case of conventional iced chestnuts and candied fruit, since the fruit prepared in accordance with this invention are protected by the resistant icing layer.

Finally, upon use it is sufficient merely to open the container and drain the fruit and/or chestnuts which have remained impeccably iced and ready for immediate consumption, whereas heretofore it was necessary to effect

[Price 4s. 6d.]

a new icing to replace the icing which was not able to withstand the heat and humidity of the syrup.

- 5 In the method in accordance with the present invention, the fruit is immersed in a syrup comprising sugars and at least one gelatinous product selected from the group consisting of alginates and carraghenates. These gelatinous products are vegetable gelatins derived from marine algae. The alginates which are suitable for use in the invention are the salts of alginic acid, particularly sodium alginate. Among suitable carraghenates is the product known as Satiagum which is a sodium carraghenate having the general formula $(\text{NaSO}_4\text{C}_6\text{H}_7\text{O}_4)_n$ wherein $\text{C}_6\text{H}_7\text{O}_4$ is a galactose chain.

The following examples illustrate the invention:

20 EXAMPLE 1

- Chestnuts, cherries and plums impregnated with sugar were steeped in a solution comprising about 50 kilograms of icing sugar, 40 kilograms of glucose, 25 litres of water and 25 1.5 kilograms of sodium alginate. The fruit was drained. Some of the fruit was then immersed in a solution containing about 50 grams of calcium chloride per litre of water. Other fruit was sprayed with a similar calcium chloride solution. Some of the fruit 30 from each batch was then examined and was found to be suitable for consumption, and other fruit from each bath was preserved and sterilized in a syrup bath. After storage the preserved fruit was removed from the syrup bath and was found to be still satisfactorily iced.

EXAMPLE 2

- The procedure of Example 1 was repeated 40 using an icing solution containing 1.5 kilograms of carraghenate in place of the alginate. The carraghenate used was the product known as Satiagum which is a refined extract of marine algae having the general formula $(\text{NaSO}_4\text{C}_6\text{H}_7\text{O}_4)_n$. Satisfactory results were obtained as in Example 1.

The present invention also provides a combination product consisting of an iced chestnut or other candied fruit covered with an icing film and permanently iced in a bath of 50 syrup.

In the following claims, the word "fruit" includes both chestnuts and other candied fruit.

WHAT I CLAIM IS:—

1. A method of icing and preserving chestnuts and other candied fruit impregnated with sugar which comprises applying to the fruit a coating of syrup comprising sugars and at least one gelatinous product selected from the group consisting of alginates and carraghenates and contacting the coating with an aqueous calcium chloride solution to fix and coagulate with coating.
2. A method as claimed in claim 1, in which the fruit is immersed in the syrup.
3. A method as claimed in claim 2 in which the syrup contains about 50 parts of sugar, 40 parts of glucose, 25 parts of water and 1.5 parts of alginate and/or carraghenate, all parts being by weight.
4. A method as claimed in claim 1, in which the fruit having the coating applied thereto is immersed in an aqueous calcium chloride solution containing about 50 grams of calcium chloride per litre of water.
5. A method as claimed in claim 1, in which the fruit having the coating applied thereto is sprayed with a solution containing about 50 grams of calcium chloride per litre of water.
6. An iced chestnut or other candied fruit produced by the method of claim 1.
7. A method as claimed in claim 1, in which the fruit obtained are enclosed in a tight, syrup-filled container which is heated to preserve the fruit.
8. A combination product consisting of an iced chestnut or other candied fruit covered with an icing layer and permanently iced in a bath of syrup.

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